ROYAL ASTRONOMICAL SOCIETY.

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SIR JOHN F. W. HERSCHEL, Bart., President, in the Chair.

Edward Joseph Lowe, Esq., of Highfield House, near Nottingham, was balloted for, and duly admitted a Fellow of the Society.

FLORA.

Observations.

GÖTTINGEN. Meridian. (Professor Gauss.)

1847.	Göttingen M.T. h m s	R.A. ° ′ ″	N.P.D. ° ′ ″
Dec. 10	11 11 4	66 47 26·2	75 37 9·9
11	6 7	32 5·4	34 17·4
12	11 1 11	66 16 59·8	75 31 20·0

HAMBURG. Meridian Circle. (M. Rümker.)

1847.	Hamburg M.T. h m s	R.A. ° ′ ″	N.P.D. ° ′ ″
Nov. 16	13 10 50·1	73 9 28·4	76 13 18·3
17	5 59·2	72 55 41·3	12 52·9
18	13 1 6·8	72 41 31·8	12 27·1
21	12 46 21·7	71 57 3·8	10 33·8
22	41 23·1	41 37·4	9 45·8
24	31 26·3	71 10 1·4	7 47·8
27	16 23·5	70 21 8·0	4 7·9
28	12 11 21·4	70 4 31·0	76 2 41·9
Dec. 1	11 56 13·8	69 14 26·4	75 57 46·7
4	41 6·4	68 24 22·2	51 53·7
7	26 2·0	67 35 4·1	44 59·0
8	11 21 1·7	67 18 56·3	42 29·9
18	10 32 4·3	64 53 57·4	11 15·6
19	27 18·8	41 31·5	7 35·0
20	10 22 35·6	64 29 38·4	75 3 45·7

HAMBURG. With the Equatoreal and Micrometer. (M. Rümker.)

1847.	h m s	° ′ ″	° ′ ″
Nov. 21	9 1 7·8	71 59 35·1	76 10 38·2
25	8 21 7·5	70 55 46·4	76 6 55·6
Dec. 4	9 14 4·4	68 26 6·6	75 52 7·6
6	15 5 29·1	67 50 10·7	75 47 13·5
17	7 43 15·4	65 8 31·6	75 15 23·2

WASHINGTON. (Lieut. M. F. Maury, U.S.N.)

1847.	Washington M.T. h m s	R.A. h m s	N.P.D. ° ′ ″	No. of Obs. R.A.	No. of Obs. N.P.D.	Instrum.	Star of Comp.
Nov. 29	12 5 11	4 39 5·64	76 0 46·1	2	1	*Mer. C.	
		5·51		1		W. Tran.	
Dec. 3	11 44 55	34 27·70	75 53 25·2	1	1	Mur. C.	*a* in R.A.
	13 25 15	22·37	19·2	18	6	Equat.	*a*
4	6 54 30	33 35·16		8		Equat.	*b*
	6 46 40		75 51 45·2		2	—	*b*
6	8 0 23	31 19·44	75 47 8·2	12	5	—	*b* and *c*
	11 29 50	31 9·51		7		W. Tran.	
		9·83	75 46 48·9	7	1	Mer. C.	
			48·8		1	Mur. C.	
7	11 24 49	30 4·35	75 44 21·1	7	1	Mer. C.	
		4·48		5		W. Tran.	
			75 44 23·5		1	Mur. C.	
8	11 19 49	4 29 0·20		5		W. Tran.	
		0·38	75 41 51·1	7	1	Mer. C.	
			56·0		1	Mur. C.	

The observations are corrected for refraction only.

Mean Places of the Stars of Comparison, 1847·0 :—

	R.A. h m s	N.P.D. ° ′ ″	Authorities. R.A.	Decl.
a	4 33 25·76	75 58 18·7	Rümker, 1256.	Washington Obs.
b	37 54·23	45 8·7	Bessel, iv. 824, H.C. p. 203.	—
c	4 36 4·45	75 39 44·5	Rümker, 1265.	—

* The names of the observers, though given by Lieut. Maury, are omitted here from want of space: there can be no doubt of their skill or fidelity. The wealth of the Observatory in instruments is rather perplexing: a large Equatoreal, a Transit, distinguished by its locality as West, a Meridian Circle, and a Mural Circle, have all been employed.

Elements. By Mr. Graham, of the Observatory, Markree.

Epoch 1848, Jan. 1·0, Greenwich Mean Time.

	° ′ ″	
Mean Anomaly	35 33 0·27	
π	33 26 55·31	Mean Eq.
Ω	110 13 26·98	1848·0
i	5 53 57·12	
φ	8 55 59 11	

$\mu = 1085''{\cdot}8205$ Log $a = 0{\cdot}3428324$.

These elements are deduced from the South Villa Observations of October 18, and from the following Markree places:—

Greenwich M.T. 1847.	R.A. ° ′ ″	N.P.D. ° ′ ″
Nov. 17·569130	72 55 2·10	76 12 51·0
Dec. 18·462247	64 53 21·15	75 11 6·8

For the middle place:—

	Calc^{d}—Obs^{d}. ″
Longitude =	+1·3
Latitude =	−0·2

Ephemeris. For Greenwich Mean Midnight.

By Mr. Hind, from his *Third* Elements.

1848.	R.A. h m s	N.P.D. ° ′ ″	1848.	R.A. h m s	N.P.D. ° ′ ″
Feb. 1	4 18 36·97	71 9 30·0	Feb. 22	4 40 55·48	69 2 38·6
2	19 24·64	71 3 15·5	23	42 14·67	68 56 59·4
3	20 14·11	70 57 1·4	24	43 35·06	51 23·3
4	21 5·35	50 47·9	25	44 56·64	45 50·3
5	21 58·33	44 35·0	26	46 19·38	40 20·6
6	22 53·01	38 23·0	27	47 43·27	34 54·2
7	23 49·38	32 12·0	28	49 8·28	29 31·3
8	24 47·39	26 1·8	29	50 34·40	24 12·1
9	25 47·01	19 52·7	March 1	52 1·61	18 56·6
10	26 48·21	13 44·8	2	53 29·88	13 44·9
11	27 50·96	7 38·3	3	54 59·20	8 37·1
12	28 55·23	70 1 33·3	4	56 29·56	68 3 33·4
13	30 1·01	69 55 30·0	5	58 0·93	67 58 33·8
14	31 8·25	49 28·5	6	4 59 33·28	53 38·4
15	32 16·93	43 29·0	7	5 1 6·60	48 47·3
16	33 27·02	37 31·6	8	2 40·86	44 0·7
17	34 38·48	31 36·4	9	4 16·04	39 18·6
18	35 51·28	25 43·6	10	5 52·11	34 41·0
19	37 5·40	19 53·3	11	7 29·06	30 8·1
20	38 20·83	14 5·6	12	9 6·88	25 39·9
21	4 39 37·53	69 8 20·7	13	5 10 45·54	67 21 16·6

1848.	R.A. h m s	N.P.D. ° ′ ″	1848.	R.A. h m s	N.P.D. ° ′ ″
Mar. 14	5 12 25·02	67 16 58·3	April 8	5 57 30·21	65 59 29·3
15	14 5·31	12 45·0	9	5 59 25·48	57 42·2
16	15 46·37	8 36·9	10	6 1 21·18	56 1·6
17	17 28·18	4 33·9	11	3 17·28	54 27·5
18	19 10·74	67 0 36·2	12	5 13·76	52 59·9
19	20 54·02	66 56 43·8	13	7 10·63	51 38·8
20	22 38·01	52 56·8	14	9 7·84	50 24·3
21	24 22·69	49 15·3	15	11 5·40	49 16·5
22	26 8·05	45 39·3	16	13 3·31	48 15·3
23	27 54·08	42 8·9	17	15 1·53	47 20·7
24	29 40·76	38 44·2	18	17 0·05	46 32·8
25	31 28·08	35 25·2	19	18 58·86	45 51·6
26	33 16·02	32 12·0	20	20 57·97	45 17·0
27	35 4·58	29 4·6	21	22 57·38	44 49·2
28	36 53·74	26 3·1	22	24 57·08	44 28·1
29	38 43·48	23 7·5	23	26 57·05	44 13·7
30	40 33·80	20 17·9	24	28 57·28	44 6·1
31	42 24·67	17 34·3	25	30 57·75	44 5·2
April 1	44 16·10	14 56·9	26	32 58·45	44 11·1
2	46 8·07	12 25·6	27	34 59·38	44 23·9
3	48 0·56	10 0·5	28	37 0·53	44 43·5
4	49 53·56	7 41·6	29	39 1·90	45 9·9
5	51 47·04	5 29·0	30	41 3·49	45 43·2
6	53 40·98	3 22·7	May 1	6 43 5·27	65 46 23·3
7	5 55 35·37	66 1 22·8			

This ephemeris gives the places of the planet reckoned from the *true* equinox of date: the aberration has not been applied. By adding the correction due to aberration from the annexed table to the values of the ephemeris, the *apparent* places of the planet will be obtained.

1848.	Corr. for Aberr. R.A. s	Corr. for Aberr. N.P.D. ″	497ˢ·8 × Δ m s	Hor. Par. ″	1848.	Corr. for Aberr. R.A. s	Corr. for Aberr. N.P.D. ″	497ˢ·8 × Δ m s	Hor. Par. ″
Feb. 1	−0·37	−3·0	11 26·3	6·23	Mar. 20	−1·19	−2·6	16 27·0	4·33
5	0·44	3·1	11 49·6	6·02	24	1·25	2·4	16 52·7	4·22
9	0·51	3·1	12 13·5	5·82	28	1·32	2·1	17 18·2	4·11
13	0·58	3·2	12 37·9	5·63	April 1	1·37	1·9	17 43·7	4·01
17	0·65	3·2	13 2·6	5·46	5	1·43	1·6	18 9·0	3·92
21	0·72	3·2	13 27·6	5·29	9	1·49	1·3	18 34·0	3·83
25	0·79	3·2	13 52·9	5·13	13	1·54	1·0	18 58·8	3·75
29	0·86	3·1	14 18·4	4·98	17	1·60	0·7	19 23·3	3·67
Mar. 4	0·93	3·1	14 44·0	4·83	21	1·65	−0·3	19 47·6	3·60
8	1·00	3·0	15 9·7	4·69	25	1·69	0·0	20 11·5	3·53
12	1·06	2·9	15 35·5	4·56	29	−1·74	+0·4	20 35·1	3·46
16	−1·13	−2·7	16 1·3	4·44					